

**AMENDMENTS TO THE CLAIMS:**

Kindly cancel claim 24. Please amend claims 1, 3, 4, 5, 7, 22, 23, 25, 26, 28, 29, 34, 48, 49, 55, 56, 57, 59, 63 and 67 as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

**Claim 1 (currently amended):** A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles, with essentially a zero velocity in the direction of said dielectric substrate, in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby to drive said charged particles from the aerosol and deposit said charged particles as oppositely charged layers on said dielectric substrate thus forming a built-up deposit.

**Claim 2 (canceled)**

**Claim 3 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in

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said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said aerosol particles are charged.

**Claim 4 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said aerosol particles comprise particles of dry powder.

**Claim 5 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited

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as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said aerosol particles comprise liquid droplets.

**Claim 6 (original):** The method according to claim 4, wherein said dry powder particles are triboelectrically charged.

**Claim 7 (currently amended):** The method according to claim 1 [[5]] wherein said aerosol particles comprise liquid droplets ~~are~~ charged by a charge injector during droplet formation.

**Claim 8 (previously presented):** A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said aerosol particles comprise a pharmaceutical.

**Claim 9 (original):** The method according to claim 4, wherein said dry powder particles comprise carrier particles coated with a bioactive agent.

**Claims 10-13 (canceled)**

**Claim 14 (previously presented):** A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region;

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transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said alternating electric field has a magnitude between 1 kV/cm and 30 kV/cm.

**Claim 15 (previously presented):** The method according to claim 14, wherein said alternating electric field has a frequency of between 1 Hz and 100 kHz.

**Claim 16 (previously presented):** The method according to claim 14, wherein said alternating field has a duty cycle different than 50%.

**Claim 17 (original):** The method according to claim 16, wherein said duty cycle is 90%.

**Claim 18 (previously presented):** The method according to claim 14, wherein said alternating electric field is formed between a first electrode positioned at an end of said deposition zone opposite to and facing said dielectric substrate and a second electrode in contact with said dielectric substrate on the opposite side of where said deposit is formed.

**Claim 19 (original):** The method according to claim 18, wherein said first electrode is an element of an ion emitter.

**Claim 20 (original):** The method according to claim 19, wherein said aerosol particles are discharged after being deposited.

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**Claim 21 (original):** The method according to claim 18, wherein the contact area of said second electrode with said dielectric substrate determines the location of said deposition.

**Claim 22 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein substantially all of said aerosol particles are removed from said aerosol to form said deposit.

**Claim 23 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit,

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wherein the gas of said aerosol is selected from the group consisting of air, nitrogen, and nitrogen/carbon dioxide mixtures.

**Claim 24 (canceled)**

**Claim 25 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said dielectric substrate comprises a packaging medium.

**Claim 26 (currently amended):** A method according to claim 25, wherein said packaging medium comprises a blister, tablet, capsule or ~~tablet~~ tubule.

**Claim 27 (original):** The method according to claim 26, wherein the blister comprises a plastic or metal foil blister package.

**Claim 28 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an

alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said unitary dielectric substrate comprises a pharmaceutical carrier.

**Claim 29 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said unitary dielectric substrate comprises a carrier for carrying said deposit from said deposition zone to a location remote from said deposition zone for further processing.

**Claim 30 (previously presented):** A method for depositing particles onto a dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second

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region and a second electrode positioned underlying and in contact with said dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said dielectric substrate thus forming a built-up deposit, wherein said dielectric substrate is edible.

**Claim 31 (canceled)**

**Claim 32 (previously presented):** The method according to claim 34, wherein said ion emitter comprises a silent electric discharge device.

**Claim 33 (previously presented):** The method according to claim 34, wherein said ion emitter comprises an ion radiation source.

**Claim 34 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said aerosol particles are charged by an ion emitter.

**Claim 35 (previously presented):** The method according to claim 22, wherein the mass of said deposit is controlled by integrating the mass of said aerosol particles over time.

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**Claim 36 (previously presented):** The method according to claim 35, where said time is determined by the measured mass of said aerosol particles.

**Claim 37 (previously presented):** The method according to claim 22, wherein multiple deposits are made using multiple deposition zones supplied from a single aerosol source by multiplexing the application of the alternating deposition field between the deposition zones.

**Claims 38-47 (canceled)**

**Claim 48 (currently amended):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, with the particles of said aerosol essentially at respective fixed distances relative to the surface of said dielectric substrate stationary in said second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby to drive said particles from the aerosol and deposit said charged particles as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode.

**Claim 49 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary

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dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said particles comprise a solid or a liquid.

**Claim 50 (canceled)**

**Claim 51 (previously presented):** The method according to claim 49, wherein said particles comprise carrier particles coated with a bioactive agent.

**Claim 52 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said particles comprise a pharmaceutical.

**Claim 53 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said aerosol carrier is nitrogen gas.

**Claim 54 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving

said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said substrate opposite said underlying electrode, wherein said dielectric substrate comprises a blister pack.

**Claim 55 (currently amended):** A method for depositing particles onto a surface of a unitary dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said unitary dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said unitary dielectric substrate opposite said underlying electrode, wherein said unitary dielectric substrate comprises an electrically insulating material.

**Claim 56 (currently amended):** A method for depositing particles onto a surface of a unitary dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said unitary dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said unitary dielectric substrate opposite said underlying electrode, wherein said unitary dielectric substrate is comprised of an electrically conducting material.

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**Claim 57 (currently amended):** A method for depositing particles onto a surface of a unitary dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said unitary dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said unitary dielectric substrate opposite said underlying electrode, wherein said electrically charging means employs a corona wire or corona emitting points.

**Claim 58 (canceled)**

**Claim 59 (currently amended):** A method for depositing particles onto a unitary dielectric substrate comprising the steps of forming an aerosol of said particles in a first region; transporting the resulting aerosol to a second region, and applying a charge on said aerosol particles in said second region, positioning said charged aerosol particles in a deposition zone located in said second region proximate to said unitary dielectric substrate, and applying an alternating electric field formed in said deposition zone between a first electrode positioned in said second region and a second electrode positioned underlying and in contact with said unitary dielectric substrate whereby said charged particles are removed from the aerosol and deposited as oppositely charged layers on said unitary dielectric substrate thus forming a built-up deposit, wherein said step of applying an alternating electric field is performed by: electrically charging ~~means includes~~ a charge source comprising a solid dielectric member, a first electrode in contact with one side of said solid dielectric member, a second electrode in contact with an opposite side of said dielectric member, with an edge surface of said second electrode disposed opposite said

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first electrode to define an air region at the junction of said edge surface and said solid dielectric member, and means for applying an alternating potential between said first and second electrodes to induce ion producing electrical discharges in the air region between the dielectric member and the edge surface of said second electrode.

**Claim 60 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said electrically charging means includes triboelectric charging of said aerosol particles or induction charging of said aerosol particles.

**Claim 61 (canceled)**

**Claim 62 (original):** The method according to claim 48, wherein said aerosol particles are charged outside of said deposition region.

**Claim 63 (currently amended):** A method for depositing particles onto a surface of a unitary dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said unitary dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said unitary dielectric substrate

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opposite said underlying electrode, wherein said aerosol particles are charged within said deposition region.

**Claim 64 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein said electrically alternating field has a magnitude between about 1 kV/cm and about 30 kV/cm.

**Claim 65 (previously presented):** The method according to claim 64, wherein said electrically alternating field has a frequency of oscillation between about 1 Hz and 100 kHz.

**Claim 66 (previously presented):** The method according to claim 64, wherein the duty cycle of the alternating field is adjusted to provide maximum efficiency of said particle deposition.

**Claim 67 (currently amended):** The method according to claim 64, wherein said electrically alternating field is formed between a first electrode positioned at one side of said deposition region opposite and facing said unitary dielectric substrate and a second electrode contiguous to said unitary dielectric substrate.

**Claim 68 (canceled)**

**Claim 69 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving

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said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein the pattern of deposited material is defined by an electrically conducting mask disposed adjacent said charging means.

**Claim 70 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein the aerosol particle mass flow is monitored whereby the mass of deposited particles is controlled.

**Claim 71 (previously presented):** A method for depositing particles onto a surface of a dielectric substrate that comprises forming an aerosol of said particles in a first region, moving said aerosol to a second region, electrically charging said particles in said second region, and providing an alternating electric field between an electrode underlying said dielectric substrate and said aerosol particles in said second region whereby said particles are deposited as a built-up deposit of oppositely charged layers on the surface of said dielectric substrate opposite said underlying electrode, wherein multiple deposits are made using multiple deposition regions

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supplied from a single aerosol source by multiplexing the application of the alternating deposition field between the deposition regions.

**Claims 72-73 (canceled)**

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